

### **Remarks**

Claims 21-25 and 28-37 are pending in the present application. Reconsideration is requested in view of the following remarks.

#### **I. Rejection of Claims 21-25, 28-29, 31-33 and 35 Over Bergstein and Johnson**

Claims 21-25, 28-29, 31-33 and 35 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious from U.S. Patent No. 2,628,179 to Bergstein (Bergstein) and European Patent No. 776,848 to Johnson (Johnson). Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claim 21 recites a method of forming a cutting edge on a dispensing carton comprising supplying a roll of tape to an application station, the tape having a polymeric backing coated with an adhesive on one side, applying a length of the tape to a length of carton board and laminating the tape to the carton board, and cutting the carton board and tape lengthwise to separate the carton board into carton blanks and form a cutting edge on each carton blank

In contrast, Bergstein discloses a device for applying metallic strips to carton blanks, rather than a tape comprising a polymeric backing, as recited in claim 21. A primary advantage of forming the cutting edge from a polymeric tape instead of metal strips is that the polymeric material is not as sharp as and is less likely to cause injury to the consumer as metal. See page 2, lines 5-7 of the application. Bergstein fails to recognize that polymeric tape can be a suitable alternative to metal strips and certainly does not appreciate any of the advantages of using such material.

In the rejection of claim 21, the action contends that cutting edges of polymeric material are well known in the art and that it would have been obvious to use polymeric tape in the Bergstein method because “it is obvious to replace one material with another art recognized alternative material.” The action cites Johnson to support the statement that polymeric materials such as polyester, polyethylene, and polypropylene are well known alternatives to metal strips. In reply, Applicants submit that the teachings of Bergstein and Johnson do not suggest the specific method recited in claim 21.

When an obviousness rejection is based on the presupposition that the material recited in the claim is an equivalent of the prior art material, the equivalency must be recognized in the

prior art. MPEP § 2144.06, citing *In re Scott*, 323 F.2d 1016, 139 U.S.P.Q. 297 (CCPA 1963) (reversing an obviousness rejection based on equivalent components; holding that the light wood or hardened foam resin core of the prior art does not fairly suggest the use of the claimed paper core). The citation of Johnson does not meet the PTO's burden of showing that polymeric tape is recognized in the art as being a suitable material for forming the type of cutting elements disclosed in Bergstein.

Johnson, like Bergstein, does not teach or suggest applying tape having a polymeric backing to a carton board and cutting the board and the tape to form a cutting edge, as recited in claim 21. Johnson discloses a relatively thick cutting edge 10 comprising a plastic web 12 having a plurality of separate, spaced apart cutting ribs 14 that cut the film or paper dispensed from a container. For food wrap applications, the cutting edge 10 usually has a width of about 0.25 to 0.75 inch (6.35 to 19.05 mm), and for adhesive tape applications, the cutting edge 10 usually has a width of about 0.25 to 1 inch (6.35 to 25.4 mm). Page 2, lines 40-42 of Johnson. By comparison, the tape used in the instantly claimed method can be, for example, between 0.05 mm to about 0.18 mm, which is two to three orders of magnitude less than the smallest width (6.35 mm) of Johnson's cutting edge 10. While Johnson's cutting element 10 is formed from a polymer, this ribbed structure is much different than the cutting edge formed by the method of claim 21 or Bergstein's metal strips.

Further, unlike claim 21 and Bergstein's metal strips, Johnson's polymeric cutting edge 10 requires longitudinally spaced cutting ribs 14 to form an effective cutting mechanism. With respect to the cutting ribs 14, Johnson states: "The mass of ribs projecting above the rib-bearing surface of the web must be sufficient to provide an effective contact with the film that is to be cut by the cutting edge. That is, the effectiveness of the cutting edge may be reduced if an insufficient mass of ribs projects from the web." In this regard, Johnson actually teaches against using polymers to form a cutting element using the Bergstein technique because the latter does not form any ribs, which, according to Johnson, are required to form an effective cutting mechanism. Thus, one skilled in the art would not have recognized from Johnson that polymeric tape is recognized in the art as being a suitable material for forming the type of cutting elements disclosed in Bergstein.

If anything, the teachings of Johnson undercut, rather than support, the presupposition that polymers can be used to form the cutting strips disclosed in Bergstein, which does not rely

on any ribs to form an effective cutting edge. Furthermore, the technology disclosed in Bergstein is over 50 years old (Bergstein issued in 1953), yet there appears to be no evidence whatsoever in the prior art of record that polymeric tapes have been used in a similar process. The application of polymeric tape to form a cutting edge in the manner recited in claim 21 flies in the face of over 50-year-old technology. The fact that Johnson takes a much different approach for forming cutting elements from polymers than Applicants' method only reinforces that it would not have been obvious to use a polymeric tape in the Bergstein technique to form a cutting edge.

Accordingly, for at least the foregoing reasons, the method as set out in claim 21 is not rendered obvious by Bergstein and Johnson and is allowable.

Claims 22-25, 28-29, 31-33 and 35 depend from claim 21 and are allowable for the reasons given above in support of claim 21 and because each dependent claim sets forth an independently patentable combination of features.

For example, amended claim 29 further specifies that the tape is applied in registry with preformed adjacent edges of the carton blanks cut from the carton board. In contrast to claim 29, Bergstein, as presently understood, involves applying metal strips to unitary sheets 21, which are subsequently cut lengthwise to form the edges of the blanks. The sheets 21 can be in the form of unscored sheets (FIG. 10) or blanks A and B joined to each other at their top edges (FIG. 11). None of the cutting edges disclosed in Bergstein is formed by applying metal strips in registry with preformed adjacent edges of carton blanks.

## **II. Rejection of Claim 30 Over Bergstein, Johnson, and Kawai**

Claim 30 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Bergstein, Johnson, and U.S. Patent No. 5,897,736 to Kawai et al. (Kawai). Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claim 30 depends from claim 21 and is allowable for the reasons given above in support of claim 21 and because claim 30 sets forth an independently patentable combination of features.

### **III. Rejection of Claim 34 Over Bergstein, Johnson, and Kerr**

Claim 34 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Bergstein, Johnson, and U.S. Patent No. 3,729,648 to Kerr (Kerr). Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claim 34 depends from claim 21 and is allowable for the reasons given above in support of claim 21 and because claim 34 sets forth an independently patentable combination of features.

### **IV. Rejection of Claims 21-25, 28-29, 31-32 and 35-37 Over Marcalus and Johnson**

Claims 21-25, 28-29, 31-32 and 35-37 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious from U.S. Patent No. 1,843,429 to Marcalus (Marcalus) and Johnson. Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Unlike claim 21, Marcalus does not teach or suggest the use of a polymeric tape for forming a cutting edge. Instead, Marcalus involves supplying a roll 14 of indurated (hard) paper C (or stencil board), applying glue to the paper C as it is dispensed from the roll, pressing the paper against an edge portion of a carton blank, and shearing off the forward end of the material adhered to the blank to form a cutting edge.

In the rejection of claim 21, the action contends that cutting edges of polymeric material are well known in the art and that it would have been obvious to use polymeric tape in the Marcalus method because “it is obvious to replace one material with another art recognized alternative material.” The action cites Johnson to support the statement that polymeric materials such as polyester, polyethylene, and polypropylene are well known alternatives to the indurated paper used in the Marcalus process. In reply, Applicants submit that the teachings of Marcalus and Johnson do not suggest the specific method recited in claim 21.

When an obviousness rejection is based on the presupposition that the material recited in the claim is an equivalent of the prior art material, the equivalency must be recognized in the prior art. MPEP § 2144.06, citing *In re Scott*, 323 F.2d 1016, 139 U.S.P.Q. 297 (CCPA 1963) (reversing an obviousness rejection based on equivalent components; holding that the light wood or hardened foam resin core of the prior art does not fairly suggest the use of the claimed paper core). The citation of Johnson does not meet the PTO’s burden of showing that polymeric tape is

recognized in the art as being a suitable material for forming the type of cutting elements disclosed in Marcalus.

Johnson, like Marcalus, does not teach or suggest applying tape having a polymeric backing to a carton board and cutting the board and the tape to form a cutting edge, as recited in claim 21. Instead, Johnson discloses a relatively thick cutting edge 10 comprising a plastic web 12 having a plurality of separate, spaced apart cutting ribs 14 that cut the film or paper dispensed from a container. For food wrap applications, the cutting edge 10 usually has a width of about 0.25 to 0.75 inch (6.35 to 19.05 mm), and for adhesive tape applications, the cutting edge 10 usually has a width of about 0.25 to 1 inch (6.35 to 25.4 mm). Page 2, lines 40-42 of Johnson. By comparison, the tape used in the instantly claimed method can be, for example, between 0.05 mm to about 0.18 mm, which is two to three orders of magnitude less than the smallest width (6.35 mm) of Johnson's cutting edge 10. While Johnson's cutting element 10 is formed from a polymer, this ribbed structure is much different than the cutting edge formed by the method of claim 21 or Marcalus' cutting element.

Unlike the cutting edge formed by the method of claim 21 and Marcalus' indurated-paper cutting element, Johnson's polymeric cutting edge 10 requires longitudinally spaced cutting ribs 14 to form an effective cutting mechanism. With respect to the cutting ribs 14, Johnson states: "The mass of ribs projecting above the rib-bearing surface of the web must be sufficient to provide an effective contact with the film that is to be cut by the cutting edge. That is, the effectiveness of the cutting edge may be reduced if an insufficient mass of ribs projects from the web." In this regard, Johnson actually teaches against using polymers to form a cutting element using the Marcalus technique because the latter does not form any ribs, which, according to Johnson, are required to form an effective cutting mechanism. Thus, one skilled in the art would not have recognized from Johnson that polymeric tape is recognized in the art as being a suitable material for forming the type of cutting elements disclosed in Marcalus.

If anything, the teachings of Johnson undercut the presupposition that polymers can be used to form the cutting strips disclosed in Marcalus, which does not rely on any ribs to form an effective cutting edge. Furthermore, the technology disclosed in Marcalus is over 70 years old (Marcalus issued in 1932), yet there appears to be no evidence whatsoever in the prior art of record that polymeric tapes have been used in a similar process. The application of polymeric tape to form a cutting edge in the manner recited in claim 21 flies in the face of over 70-year-old

technology. The fact that Johnson takes a much different approach for forming cutting elements from polymers than Applicants' method only reinforces that it would not have been obvious to use a polymeric tape in the Marcalus technique to form a cutting edge.

Accordingly, for at least the foregoing reasons, the method as set out in claim 21 is not rendered obvious by Marcalus and Johnson and is allowable.

Claims 22-25, 28-29, 31-32 and 35-37 depend from claim 21 and are allowable for the reasons given above in support of claim 21 and because each dependent claim sets forth an independently patentable combination of features.

#### **V. Rejection of Claim 34 Over Marcalus, Johnson, and Kerr**

Claim 34 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Marcalus, Johnson, and Kerr. Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claim 34 depends from claim 21 and is allowable for the reasons given above in support of claim 21 and because claim 34 sets forth an independently patentable combination of features.

#### **VI. Conclusion**

The present application is in condition for allowance and such action is respectfully requested. If any further issues remain concerning this application, the Examiner is requested to call the undersigned to discuss such matters.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By: 

Jeffrey B. Haendler

Registration No. 43,652

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 595-5300  
Facsimile: (503) 228-9446